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ABSTRACT

The Australian Reading Association felt that language in mathematics was a topic worthy of inclusion in their First International Conference and 19th National Conference. As a result, this book was formed from contributions of mathematics educators in Australia and New Zealand. The book is broken into five major sections: (1) Communicating mathematical meaning, (2) Fostering good classroom practice in mathematical communication, (3) Students writing in mathematics, (4) Assessing mathematical communications, (5) Influence of culture and linguistic background. Themes included in communicating mathematical meaning are language in small group work, communicating the definition of mathematics, and the relationships among cognition, visual imagery, and language. Included in the second section are papers on applying language-learning principles to the mathematics classroom, employing story-telling and children's literature in mathematics, and introducing students to probability through everyday language. The third section discusses several possibilities for including writing in mathematical activities. Since curriculum changes necessitate changes in assessment, the fourth section discusses the language of assessment, how to assess oral and written mathematical communication, and a discussion on the Queensland Student Performance Standards approach to assessing and reporting progress. The last section addresses bilingualism and culture in mathematics with a focus on Maori and aboriginal students. Each of the 22 papers included in the text contains a reference list. (PDD)